

Serial No. 09/251,641
Docket No. 2156-056

Enclosed please find a copy of the Information Disclosure Statement noted in paragraph 7 of the office action. The Examiner is respectfully requested to consider the documents disclosed therein.

The Examiner has rejected claims 1-8 and 17-20 under 35 U.S.C. 103(a) as being unpatentable owner Ferrier, et al. (EP 0797380 A1) in view of Wakita (U.S. Patent No. 5,567,357). In this regard the Examiner has found that Ferrier teaches a process and immersion plating solution comprising a soluble source of silver ions and an acid but does not teach or suggest an additive which is selected from the group consisting of fatty amines, fatty amides, quaternary salts, amphoteric salts, resinous amines, resinous amides, fatty acids, resinous acids, ethoxylated version of any of the foregoing, propoxylated versions of any of the foregoing and mixtures of any of the foregoing. The Examiner then turns to the Wakita reference to provide a suggestion for the foregoing additives which are completely absent from Ferrier.

The Applicant believes that the foregoing rejection is not supportable for at least the following reasons:

1. The Wakita reference does not disclose or support the use of the foregoing additives in a plating bath as is required by claims 1-8 and 17-20.
2. Wakita is from an entirely different art as compared to the current application and would not generally be known to the skilled artisan in the art of the invention.
3. There is no suggestion in either the Ferrier or Wakita references that would lead an artisan skilled in the

art of this invention to combine the Ferrier and Wakita references in the manner suggested by the Examiner.

Claims 1-8 and 17-20 are directed to the inclusion of an additive selected from the group consisting of fatty amines, fatty amides, quaternary salts, amphoteric salts, resinous amines, resinous amides, fatty acids, resinous acids, ethoxylated versions of any of the foregoing, propoxylated versions of any of the foregoing and mixtures of any of the foregoing (collectively the "Additives"), directly into the immersion silver plating bath. The inventors have discovered that inclusion of the foregoing Additives in the immersion silver plating bath decreases the tendency for the immersion silver plated deposit to electromigrate upon use (See specification at page 7, lines 15-20). In absolute contrast to this, the Wakita reference deals with a composition for a conductive paint which contains, interalia, silver plated copper powder and saturated or unsaturated fatty acids.

Contrary to the Examiner's assertion, the Wakita reference does not discuss or suggest any reason why fatty acids are included in the paint. In addition, Wakita does not even mention or suggest an immersion silver plating bath in any regard. As a result, a fair reading of Wakita would not suggest the inclusion of fatty acids directly into the immersion silver plating solution of Ferrier.

As noted, the Wakita references deals with a composition for a conductive paint and is classified under class 252 subclass

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514. In contrast the instant application is in the field of plating and is classed in either class 221 (or as Ferrier in Class 427/98). Clearly the art of Wakita (conductive paints) is substantially different from the art of the present invention and from the art of the Ferrier reference (plating). As a result, the Wakita reference would not generally be known to an artisan skilled in the art of the present invention (plating) and should therefore not be used in an obviousness rejection of this application.

There is no suggestion in either the Ferrier or Wakita references that would lead an artisan skilled in the art of this invention to combine the Ferrier and Wakita references in the manner suggested by the Examiner. Teachings associated with paint compositions do not generally lead to improvements in aqueous plating baths. Clearly there is no suggestion along this line in Wakita. The inventors sought and discovered plating additives which reduce the tendency for a plated immersion silver deposit to electromigrate. Wakita provides absolutely nothing in understanding that invention.

CONCLUSION

For all of the foregoing reasons, the applicant believes that this application is in a condition for immediate allowance and such action is earnestly sought.

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REQUEST FOR TELEPHONE INTERVIEW

If the Examiner perceives of any reason why this application should not be immediately allowed he is respectfully requested to contact the undersigned at (203) 578-4271 for a telephone interview prior to issuance of the next office action.

Respectfully submitted,

By: John L. Cordani 6-2-00
John L. Cordani, Reg. 37,297
Carmody & Torrance LLP
50 Leavenworth Street
P.O. Box 1110
Waterbury, CT 06721-1110
(203) 578-4271